



#### **APPENDIX-(I)**

Declaration of Dr. Friedrich Jonas

Including comparative data of dispersions made with a PEDOT : PSS ratio of 1 : 20,  
at different  $d_{90}$  particle sizes.



PATENT APPLICATION  
Mo-6935  
LeA 34,765

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

|                           |   |                     |
|---------------------------|---|---------------------|
| APPLICATION OF            | ) |                     |
| FRIEDRICH JONAS ET AL     | ) | GROUP NO.: 1712     |
| SERIAL NUMBER: 10/057,027 | ) |                     |
| FILED: JANUARY 24, 2002   | ) | EXAMINER:           |
| TITLE: ELECTROLUMINESCENT | ) | DANIEL S. METZMAIER |
| ARRANGEMENTS              | ) |                     |
|                           | ) |                     |

**DECLARATION UNDER 37 C.F.R. §1.132**

I, Dr. Friedrich Jonas , residing at Krugenofen 15Aachen, Germany, declare as follows:

- 1) that I have the following technical educations and experience:
  - a) I am a chemist having studied at the RWTH Aachen, Germany, from 1971 to 1980
  - b) I received the degree of PhD at the RWTH Aachen in the year of 1980 .
  - c) I am employed by Bayer AG in the central research department since May 1980 and by H.C.Starck since 2001 in particular with regard to conductive polymers .
- 2) that the following tests were carried out under my immediate supervision and control:

From a Baytron® P AI 4083 PEDT solution and a polystyrene sulphonate solution a PEDT/PSS dispersion was prepared in such a way that the PEDT/PSS ratio of the resulting dispersion was 1:20. The particle size distribution of the dispersions was, in each case, measured before and after homogenization, by means of an ultracentrifuge method in accordance with that described at page 4, lines 4-6 of the specification

Coatings were subsequently produced on glass plates by spin coating followed by drying at 120°C. The resistivity of the resulting layers was determined under reduced pressure at a pressure of about  $10^{-6}$  mbar.

The results so obtained are summarized in the following table.

| Homogenization   | None   | 2 times at 400 bar | 4 times at 400 bar |
|--|--------|--------------------|--------------------|
| 90 wt.% of the particles in the dispersion in the swollen state < x nm | 55     | 53.8               | 34.3               |
| Resistivity [ $\Omega\text{cm}$ ]                                      | 17,400 | 76,000             | 130,000            |

I further declare that all statements made herein are of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States code and that such willful false statements may jeopardize the validity of pending Application Serial Number 10/057,027 or any patent issuing thereon.

Signed at Levander this 11th day of  
January, 2006

Friedrich  
Inventor name